Ontario Waste Management Corporation
Suite 707
60 Bloor Street West
Toronto, Ontario
M4W 3B8
Telephone (416) 963-1162

A Crown Agency

Corporate Profile

The formation of the Ontario Waste Management Corporation (OWMC) initially was announced in the Ontario Legislature on November 25, 1980, and OWMC was formally created by Bill 90, which received Third Reading on July 2, 1981. OWMC's primary responsibility is to design, construct and operate a province-wide system for the treatment and disposal of liquid industrial waste and hazardous waste, and to develop a long-term program to assist in the reduction and recycling of such wastes.

Objects of the Corporation

From Section 3 of The Ontario Waste Management Corporation Act, 1981:

"(a) to research, develop, establish, operate and maintain facilities for the transmission, reception, collection, examination, storage, treatment and disposal of wastes including sewage; and

(b) to perform such other duties as may be assigned to it under this or any other Act."

June, 1982

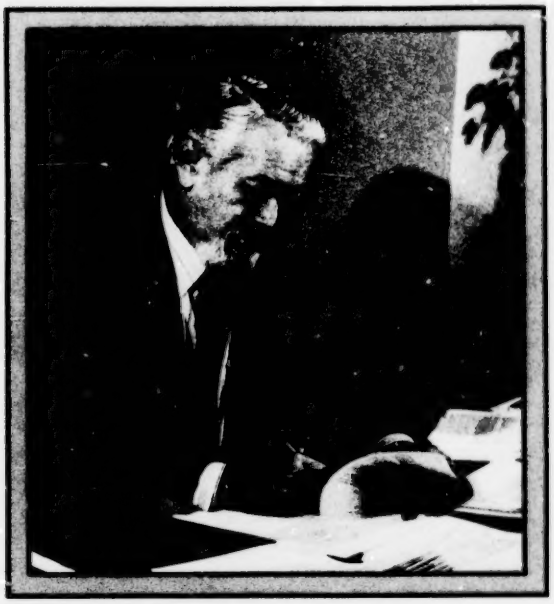
TO THE HONOURABLE
KEITH C. NORTON, Q.C.
Minister of the Environment

SIR,

I have the honour of submitting the first Annual Report of the Ontario Waste Management Corporation for the fiscal year ended March 31, 1982.

Respectfully submitted,

D.A. Chant
Chairman and President



Highlights

● The creation of the Ontario Waste Management Corporation (OWMC) was announced in the Ontario Legislature on November 25, 1980, by former Minister of the Environment, Dr. Harry Parrott. The Minister also announced a site in South Cayuga, in the Regional Municipality of Haldimand-Norfolk as the location for an industrial waste treatment and disposal facility.

● Ontario Waste Management Corp. initially was established by Articles of Incorporation on January 2, 1981 under the Business Corporations Act, and then the Crown agency was created by Bill 90: "An Act to Establish the Ontario Waste Management Corporation" and was given final reading in the Ontario Legislature on July 2, 1981.

● Donald A. Chant's appointment as Chairman and President of OWMC was announced on November 27, 1980, and a seven-member Board of Directors was announced by the Minister of the Environment between January and February 1981.

● OWMC opened its offices at 60 Bloor Street West on April 13, 1981, and a professional staff of five was hired between June and October 1981.

● In May 1981, the Board of Directors retained Gartner Lee Associates Limited, hydrogeological and geological consultants, to conduct preliminary tests on the South Cayuga site.

● Gartner Lee Associates Limited presented a report of its test results to OWMC in November 1981. On the basis of this report, the Board of Directors voted unanimously to reject the South Cayuga site for a secure landfill, and announced its decision on November 18, 1981.

● In August 1981, Proctor & Redfern Limited, Engineers and Planners, was retained as OWMC's prime engineering consultants. Its team included experts from Roy F. Weston, Inc. of Pennsylvania and the Ontario Research Foundation of Mississauga, Ontario. Two major non-site-specific studies were launched:

- a Waste Quantities Study to determine the types, quantities and sources of liquid industrial waste and other hazardous waste generated in Ontario; and

- a Generic Process Technologies Study to evaluate available industrial waste management and treatment processes in Canada, the United States, Japan and Europe.

● Gartner Lee Associates Limited was also retained in December 1981 to conduct a general hydrogeological and geological study of Southern Ontario as part of the Facilities Development Process, which is designed to evaluate alternative treatment and disposal systems and locations.

● OWMC officials contacted more than 400 organizations, provincial associations, community groups and individuals between January and March 1982 to introduce the Corporation's mandate and programs and to seek opportunities for public input.

Individual meetings were held with approximately 40 groups, including a weekend seminar in January 1982 at Niagara-on-the-Lake with representatives from 23 provincial organizations.

Message from the Chairman

On November 27, 1980, following discussions with the Premier and former Minister of the Environment, Dr. Harry Parrott, I agreed to accept the position of Chairman and President of the Ontario Waste Management Corporation. At that time, OWMC consisted of me alone – no Board of Directors, no staff, no offices, no budget and no plan. Yet the mandate was an important and urgent one – to develop, implement and manage a province-wide industrial waste management system and to do so by first examining the possibility of building a world-class treatment and disposal facility on government-owned property at South Cayuga, in the Regional Municipality of Haldimand-Norfolk.

Looking back over the first year of our operations – the appointment to the Board of Directors of six Ontario citizens, the formation of our management team, the decision on the South Cayuga site, the charting of our long-term course, the launching of major studies and the contact with more than 900 provincial organizations, groups and public representatives, I have a much greater sense of confidence and certainty than I did on that day in November 1980.

As readers of this Report are aware, however, we face an urgent problem in Ontario: serious environmental damage will occur if we do not soon provide safe and efficient treatment and disposal facilities for our liquid industrial waste and other hazardous waste, and learn how to reduce and recycle more of these wastes so that they do not require treatment. This problem is the product of an industrial society from which we all – consciously or not – derive benefits. It is not someone else's problem, and it has not diminished simply because OWMC is now established and functioning. No one is debating this point; instead, we are being asked when, how, where and at what price – to the taxpayer and to the industrial user – will solutions be made available? And how much time has been lost by examining, then rejecting, the proposed South Cayuga site?

The preliminary hydrogeological and geological studies of the South Cayuga site revealed serious shortcomings, which made it quickly apparent to the Board of Directors that we were dealing with a marginal site at best. As a result, the decision to reject the site was a logical and easy one to make, although the Board realized that a solution would now be further away than we had expected originally. Perhaps we did not immediately appreciate, however, that while time had been lost, a great deal of information had been gathered, important discussions held and key decisions taken which will assist us in determining our future course.

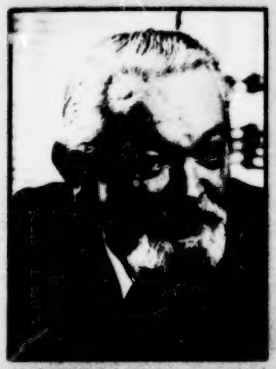
We have called that course the Facilities Development Process, which is outlined in this Report. It will be governed by several major policy decisions of the Corporation. We are convinced that a long-term waste management program is urgently required, and should be aimed at locating and building facilities as quickly as possible, and assisting Ontario industries in reducing and recycling wastes. As part of that process, the Corporation is committed to selecting state-of-the-art technology for its treatment and disposal facilities, and will place only treated waste in permanent disposal locations. A critical component of our future work is our commitment to make public the results of major studies conducted by the Corporation, and to submit our proposals to a public hearing for approval. In addition, funds will be provided to eligible participants in the hearing process. These latter two points were among the conditions of my accepting the chairman's position.

The Corporation has embarked on a process which will yield essential information on waste quantities in the province, available worldwide treatment and disposal technologies, geological and hydrogeological conditions throughout Southern Ontario, waste reduction opportunities and detailed socio-economic impact studies. This information will enable us to make the best possible decisions on the type of system we will propose to the Hearing Panel. It will also be information that has not, for the most part, been assembled and published in this form before and in a manner that will enable us to consult with the public before, rather than after, major decisions are made.

Over the past several months, our discussions with groups and individuals throughout the province have confirmed that this is the most appropriate and efficient route to take. The Corporation has an opportunity and a responsibility to prepare thorough proposals, strengthened by the views and suggestions of others. We realize, however, that OWMC must be the proponent of the proposals that go before the Hearing Panel. These proposals must be prepared in a manner that balances the necessity for urgent action and thorough preparation. Achieving this balance will not always be easy. Inevitably, some opposition will occur, but we are convinced that solutions can be found sooner if we follow this course. We have promised to be open, thorough and efficient. We intend to keep that promise to the best of our ability.

D.A. Chant,
Chairman and President

Board of Directors



The Minister of the Environment announced the appointment of seven members from January to February 1981, and by the end of March 1981, the Board had held 18 meetings.

Top, left to right:

Dr. Donald A. Chant, Chairman and President.

Zoologist, former Vice-President and Provost of the University of Toronto, and former Chairman of the Canadian Environmental Advisory Council.

V. Harvey Polk, Vice-Chairman.

Chief Engineer, Specialized Engineering, Stelco Inc., Hamilton.

Bottom, left to right:

Firman Bentley

Group Vice-President, Rubber and Plastics, Polysar Limited, Sarnia.

Mayor Edith Fuller

Mayor, Town of Haldimand, Regional Municipality of Haldimand-Norfolk.

James King

Chairman of the Board, Alfa-Laval Limited, Peterborough.

R. Stephen Rodd

Professor, School of Agricultural Economics and Extension Education; University School of Rural Planning and Development, University of Guelph.

Frank Sommer

Farmer and Director of the Ontario Federation of Agriculture for Haldimand West.

Professional Staff

Left to right:

Michael G. Scott, Director of Communications, has worked in corporate communications, university administration, public administration and teaching. His most recent position was Director of Communications for Inco Limited. Mr. Scott received a B.A. (Honours History) from York University and his Master of Public Administration from Queen's University.

Brenda J. Sakauye, Research Officer, has worked as a research and field co-ordinator for community and land use projects in northeastern Canada. Ms. Sakauye received a B.A. (Honours Geography) from McGill University and is a Masters candidate of the Environmental Studies Faculty at Waterloo University.

Edgar H. Schmidt, Project Director, is responsible for coordinating the planning, implementation and control of the Corporation's future operating facilities. Mr. Schmidt was Project Engineering Manager of Polysar Limited in Sarnia. Mr. Schmidt received his B.Sc. from Sir George Williams (now known as Concordia University) in Montreal, and also obtained a Graduate Diploma in Management from McGill University. He subsequently obtained his Master of Applied Science Degree from the Faculty of Engineering at the University of Waterloo in 1975.

Dr. Barry D. Mitchell, Director of Corporate Planning and Development and Secretary to the Board, a University of Toronto Ph.D. graduate in modern history, has held senior positions in university administration and in private business. His most recent position was Assistant Dean (Administration) of the Faculty of Dentistry at the University of Toronto.

Donald A. Chant, Chairman and President

Glenn A. Douglas, General Manager, has twenty-six years' experience in the toxic waste treatment and chemical industries, including responsibilities in operating, marketing and general management. He was previously General Manager of Stablex (Canada) Limited, an industrial waste treatment company. Mr. Douglas received a B.Sc. from McGill University.

Review of Operations '81

In November 1980, former Minister of the Environment, Dr. Harry Parrott, announced the formation of the Ontario Waste Management Corporation (OWMC). At that time, the province announced that a liquid industrial waste and hazardous waste treatment and disposal facility would be built on government-owned property in South Cayuga in the Regional Municipality of Haldimand-Norfolk. A few days later, Dr. Donald Chant was asked to serve as Chairman and President of OWMC. Dr. Chant agreed to accept the position on four conditions:

1. that extensive hydrogeological and geological studies be conducted to determine whether the site suggested was safe and suitable;

2. that public hearings be held by an independent Hearing Panel to examine any proposal OWMC submitted if the above studies confirmed to OWMC's satisfaction that South Cayuga was a safe and suitable location for a treatment and disposal facility;

3. that OWMC would be given absolute authority to decide whether or not it would make a submission to the Hearing Panel regarding the South Cayuga site; and

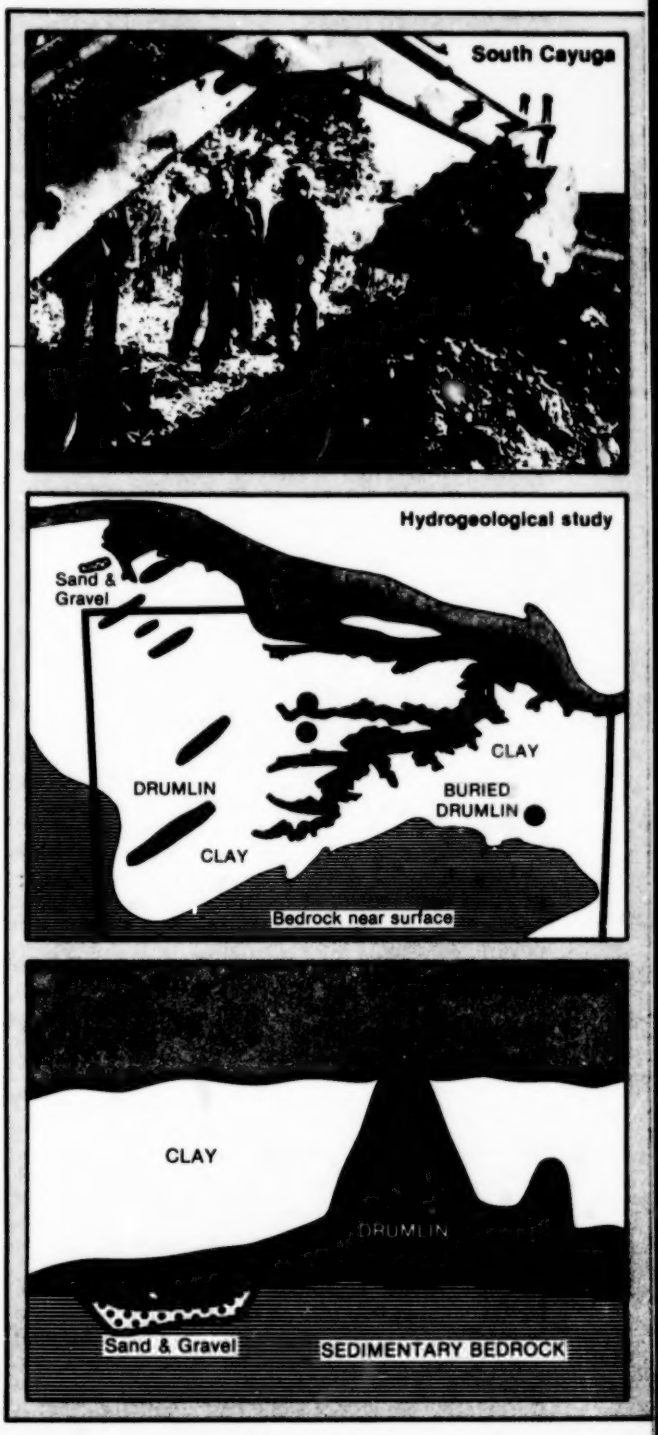
4. that eligible participants in the public hearings would receive financial assistance.

Early in 1981, the Lieutenant Governor in Council appointed a seven-member Board of Directors and on April 13, OWMC opened offices at 60 Bloor Street West. Recruitment of staff began immediately, and by October, five professional staff had been hired.

South Cayuga Decision

By mid-May, the Board had appointed Gartner Lee Associates Limited hydrogeological and geological consultants to conduct tests of the South Cayuga site. In August, Proctor & Redfern Limited, Engineers and Planners, was retained as prime consultants. Its project core group includes representatives from the Ontario Research Foundation, Mississauga, Ontario, and Roy F. Weston, Inc. of Pennsylvania.

During this time, the Corporation held several informal meetings with groups and organizations in the site area and within the Regional Municipality of Haldimand-Norfolk. Specifically, meetings were held with the Councils of the Towns of Dunnville and Haldimand, the South Cayuga Landowners' Association, HOPE (Haldimand-Norfolk Organization for a Pure Environment), the Haldimand Federation of Agriculture, the Ontario Public Interest Research Group (OPIRG), the Lake Erie Fishermans' Association, landowners in the proposed site area and with individuals who were active on their own behalf.



The Corporation also made an operating grant to the Hazardous Waste Information Centre in Dunnville for the months of September, October and November 1981. The centre originally was funded by an Environment Canada summer student grant which expired at the end of August. The Centre provided information to area residents on industrial and hazardous wastes, and available treatment and disposal technologies.

At the end of October, Gartner Lee Associates Limited submitted the results of its preliminary hydrogeological and geological studies of the South Cayuga site. The primary factors identified in the report, which led to the rejection of South Cayuga, are as follows:

• Out of the total 4,600 acres that the site comprises, almost half were ruled out as a candidate area. These unsuitable acres are above the Onandaga Escarpment and cover almost the entire southern half of the site. Because of the shallow covering of clay till over bedrock in the area, leachate could quickly reach the ground water passing through bedrock.

• Most of the remaining land in the northern half of the site was classed as a potential "flood area" because of spring ice jams on the Grand River. Whereas the Corporation recognized that this problem probably could be alleviated with "corrective" engineering, the Board of Directors agreed it would not be prudent to construct a secure landfill facility in this area.

• The Corporation was left with a portion of land on the northwestern and northeastern boundaries of the site. While the depth of clay in these areas – approximately 15 to 20 metres – was generally felt to be acceptable, it would limit the flexibility of disposal methods and thus reduce the lifespan of the facility. A larger area would be needed to ensure reasonable life expectancy.

• This led to an important, further complication. Gartner Lee's staff had noticed the presence of above-surface drumlins in the northwest portion of the site early in their review of the surface geology. (Drumlins are elliptical mounds of debris – silt, sand, gravel, and boulders – formed by retracting glaciers 10,000 years ago. Drumlins rest on bedrock and provide an easy path for leachate to travel quickly to bedrock and into ground water.) This meant that this area had to be excluded from further consideration. In October, Gartner Lee also uncovered drumlin-type material about one metre below the surface clays in a test pit dug in the remaining northeastern portion of the site. Gartner Lee concluded that this signalled the presence of an additional drumlin, with the high probability that more buried drumlins would be found in this north-eastern area. Gartner Lee also concluded that the Corporation would not likely find a sufficiently large enough area for a landfill that would be free of drumlins.

• Haldimand-Norfolk Region is an area of very active gas well exploration within the site boundaries with more than 180 recorded gas wells, with the likelihood that there were additional unrecorded wells. While the potential danger of gas wells should not be exaggerated, the sheer number of gas wells within the site area represented a legitimate concern.

The combination of these hydrogeological, geological and other terrain limitations added up to a marginal site, and on November 12, 1981, the Board voted unanimously to reject the South Cayuga site for a secure landfill. OWMC announced its decision to Premier William Davis on November 16, and at a press conference held in Toronto on November 18.

Discussing the issues . . .

Review of Operations '82

Studies and Other Activities

Following the decision to reject the South Cayuga site, OWMC began a new phase of its development. Several non-site-specific study areas were identified that will provide complete up to date information on a broad range of issues covering: the type and possible location of treatment and disposal systems, opportunities for waste reduction, recycling and recovery as well as general hydrogeological and geological conditions in Southern Ontario. In November and December 1981, OWMC launched three major studies in particular:

1. A Waste Quantities Study to determine the types, quantities and location of liquid industrial waste and other hazardous waste in Ontario.

2. A Generic Process Technologies Study to review existing technologies in Canada, the United States, Europe and Japan for the reduction, recycling, treatment and storage of liquid industrial waste and other hazardous waste.

3. A Primary Environmental Information Part I – Geological/Hydrogeological Inventory study for the Facilities Development Process to collect and analyze available hydrogeological, geological and basic environmental data on Southern Ontario. Additional studies will examine these data in more detail in appropriate regions and areas.

Apart from directing these three major studies, OWMC held discussions with their consultants on the nature of studies required on such issues as climatology, environmental factors, the type and function of laboratory testing facilities, transportation, and waste water treatment facility requirements.

Some initial presentations to OWMC were also made on specific technologies for treatment processes, and on-site discussions were held with industrial waste treatment operators in the United States.

Waste Reduction and Recycling

As part of its role to assist in the reduction and recycling of waste, the Corporation took two preliminary steps in 1981-1982. First, the Ontario Research Foundation (ORF), experts in recycling and reduction issues, was retained by Proctor & Redfern Limited. The ORF manages the Canadian Waste Materials Exchange program, a service for industry to encourage exchange of useful waste and by-product materials. Preliminary discussions were held with ORF regarding a major waste reduction study.

Second, OWMC donated $32,000 to Pollution Probe of Toronto to cover approximately one-third of the total cost of a book, "Profit from Pollution Prevention: A Guide to Industrial Waste Reduction and Recovery." The book will document examples of how companies have reduced waste by employing suitable waste management practices.

Communications

During 1981 and 1982, the Corporation implemented a communications program which evolved in two stages. The first stage concentrated on informing the public, and in particular South Cayuga area residents, about the role of OWMC and its activities in the site area. Pending the outcome of the preliminary hydrogeological and geological studies of the proposed South Cayuga site, OWMC officials and consultants held informal meetings and discussions with groups, individuals and officials at the local and regional municipal levels. A tour of the site area and Grand River was

conducted with area landowners. No information office was opened, although OWMC staff spent an average of one to two days a week in the area.

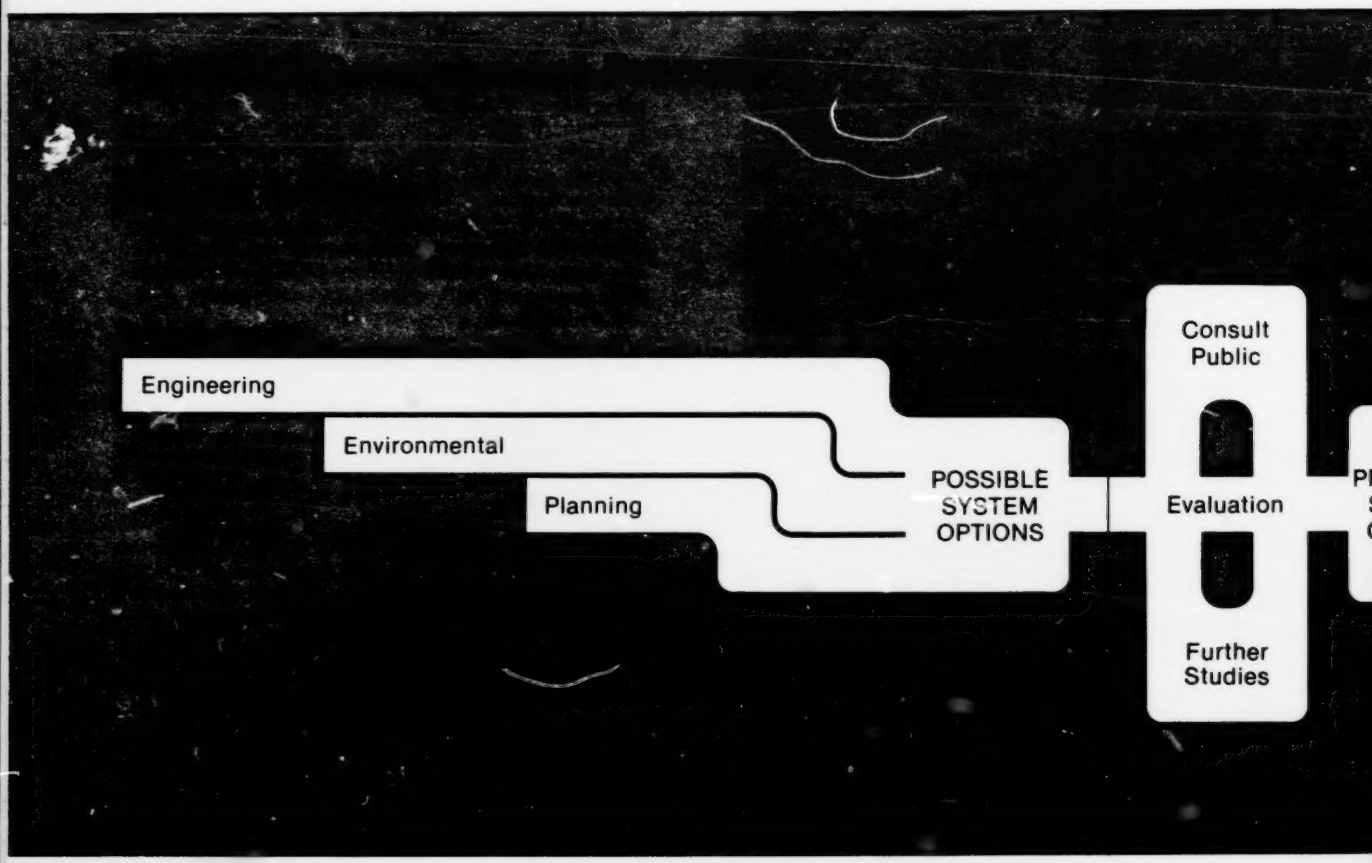
Following the rejection of the South Cayuga site, the communications program for 1981-82 moved into its second stage. Between December 1981 and March 1982, the program concentrated on introducing OWMC and the issues associated with its mandate to provincial associations and groups, outlining the Corporation's approach to its new tasks, and seeking public input. During this time, meetings and discussions were held with more than 30 provincial associations, including the Ontario Federation of Agriculture, The Canadian Chemical Producers' Association, the Canadian Manufacturers' Association, the Ontario Federation of Labour, the Ontario Trucking Association, the Federation of Ontario Naturalists, the Provincial Council of Women and the Conservation Council of Ontario. A weekend seminar in Niagara-on-the-Lake was held with representatives of 23 associations and groups. A series of six, one-day seminars for municipal officials is planned for the spring of 1982. It will be co-sponsored by OWMC and the Association of Municipalities of Ontario to discuss relevant issues concerning problems associated with waste management.

OWMC staff also began a general public information program in 1981-82, which will include a quarterly newsbulletin *EXCHANGE*, corporate brochures and fact sheets, as well as pertinent visual aid material on industrial waste management issues and the work of the Corporation.

Facilities Development Process

Following discussions with the public and a careful evaluation of the most appropriate, long-term approach to its mandate, OWMC launched a *Facilities Development Process* to determine the type and possible locations of required treatment and storage facilities.

The five-part process will examine and evaluate waste management system options prior to sub-



mitting a detailed proposal to the independent Hearing Panel. At the present time, it would appear the process will examine two basic options:

- A fully integrated treatment and disposal facility designed to serve all of Ontario's needs for many decades. Disposal facilities as well as treatment processes would all be located on one site.
- Separate treatment and disposal facilities. This system could be located as a unit, but on a regional basis, or as separate and distinct operations, with reduction, treatment and temporary storage facilities located where transportation, economic and engineering costs can be minimized, and a permanent disposal facility where necessary geological, hydrogeological and environmental conditions exist.

The five key steps in the Facilities Development Process are:

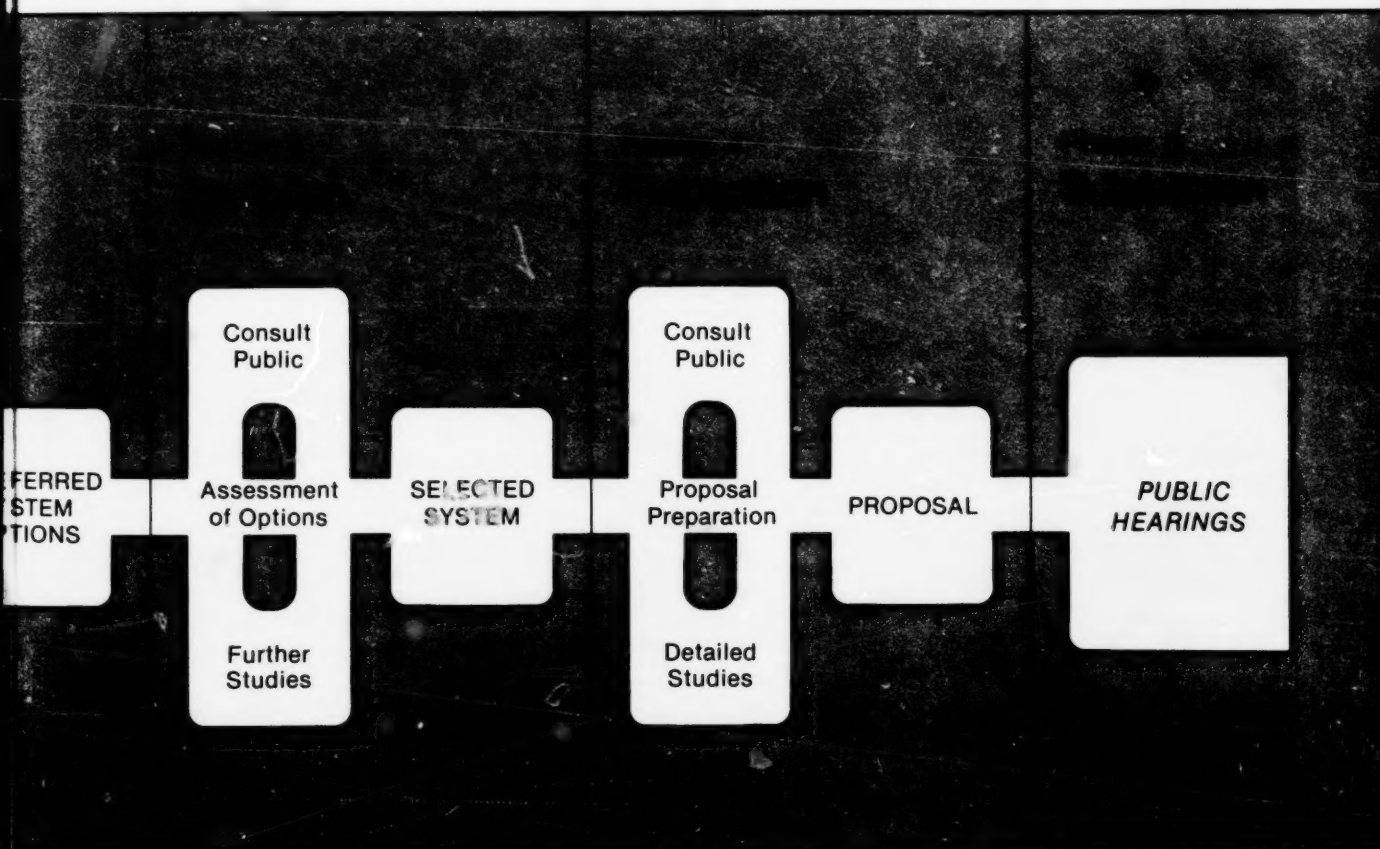
1. obtaining primary information on waste quantities, waste treatment technologies, general hydrogeological conditions in Southern Ontario, base information on transportation and land use, process requirements and availability, and waste reduction opportunities; and outlining possible system options on the basis of this key information;

2. evaluating the system options and disposal systems, defining and conducting additional studies and recommending a preferred system;

3. refining and supplementing the information obtained from further engineering, environmental and planning studies to select the specific type and location for the preferred option;

4. preparing a detailed proposal on the preferred option and location or locations; and

5. submitting the proposal to the independent Hearing Panel which will conduct public hearings.



Auditors' Report

To the Board of Directors of the Ontario Waste Management Corporation and to the Minister of the Environment.

We have examined the combined balance sheet of the Ontario Waste Management Corporations consisting of the Ontario Waste Management Corp. and the Ontario Waste Management Corporation, as at March 31, 1982 and the combined statements of revenue and expenditure and surplus and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these combined financial statements present fairly the financial position of the corporations as at March 31, 1982 and the results of their operations and changes in financial position for the year then ended in accordance with generally accepted accounting principles.

D.F. Archer, F.C.A.,
Provincial Auditor.

Thorne Riddell

Chartered Accountants

Toronto, Ontario,
May 25, 1982.

Combined Financial Statements

ONTARIO WASTE MANAGEMENT CORPORATIONS
Combined Balance Sheet
as at March 31, 1982

ASSETS	
Current	
Short term deposits	$ 50,000
Due from Province of Ontario	500,000
Loan to employee – current portion (note 3)	5,000
Sundry receivables and prepaid expenses	683
	555,683
Loan to employee (note 3)	45,000
Fixed assets (note 4)	22,912
	$623,595
LIABILITIES	
Current	
Bank overdraft	178,544
Accounts payable and accrued liabilities	233,476
	412,020
SHAREHOLDER'S EQUITY	
Share capital (note 5)	3
Surplus	211,572
	211,575
	$623,595

See accompanying notes to financial statements.

On behalf of the Corporations:

D.A. Chant, Director

V. Harvey Polk, Director

ONTARIO WASTE MANAGEMENT CORPORATIONS
Combined Statement of Revenue and Expenditure and Surplus
for the year ended March 31, 1982

Revenue	
Province of Ontario grant	$2,032,256
Interest	6,850
	2,039,106
Expenditure	
Engineering consulting services	847,036
Salaries, wages and employee benefits	287,759
Communication consulting services	157,994
Directors' fees and expenses	118,881
Management consulting and legal services	111,393
Staff recruitment and relocation	84,922
Office rent	68,784
Travel expense	42,992
Office supplies and equipment rental	39,923
Telephone and postage	18,284
Receptions, seminars and conferences	16,033
Repairs and maintenance	15,678
Books, maps and publications	7,170
Depreciation	5,728
Miscellaneous	3,321
Drafting and surveying	1,636
	1,827,534
Excess of revenue over expenditure, being surplus at end of year	**$ 211,572**

See accompanying notes to financial statements.

ONTARIO WASTE MANAGEMENT CORPORATIONS
Combined Statement of Changes in Financial Position
for the year ended March 31, 1982

Working Capital Derived From	
Excess of revenue over expenditure	$211,572
Add item not requiring an outlay of working capital:	
Depreciation	5,728
	217,300
Working Capital Applied To	
Fixed asset additions	28,640
Loan to employee	45,000
	73,640
Increase in working capital	143,660
Working capital at beginning of year	3
Working capital at end of year	**$143,663**

See accompanying notes to financial statements.

Notes to Combined Financial Statements

ONTARIO WASTE MANAGEMENT CORPORATIONS
March 31, 1982

1. General
The combined financial statements include the accounts of the Ontario Waste Management Corp. and the accounts of the Ontario Waste Management Corporation.

The Ontario Waste Management Corp. was incorporated under the Business Corporations Act on January 2, 1981. The Corp. was active up to July 3, 1981 at which time all activities and programs of the Corp. were assumed by a new entity, the Ontario Waste Management Corporation established under The Ontario Waste Management Corporation Act, 1981. The assets and liabilities of the Ontario Waste Management Corp. become the assets and liabilities of the Ontario Waste Management Corporation on a day yet to be proclaimed by the Lieutenant Governor in Council.

2. Significant Accounting Policy
Depreciation is computed on the declining balance basis at rates designed to amortize the cost of fixed assets over their estimated useful lives.

3. Related Party Transaction
During the year an interest free loan of $50,000 was made to an employee of the corporation with repayment terms of $5,000 per annum over the next ten years beginning in the fiscal year ending March 31, 1983.

4. Fixed Assets

	Cost	Accumulated Depreciation	Net Book Value	Depreciation Rates
Furniture	$23,894	$4,739	$18,955	20%
Equipment	4,946	989	3,957	20%
	$28,840	$5,728	$22,912	

5. Share Capital
The Ontario Waste Management Corp. has authorized share capital of one common share having no par value, and this share has been issued to the Province of Ontario as represented by the Minister of the Environment. The Ontario Waste Management Corporation has been incorporated without share capital.

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Readers interested in receiving more information or our newsbulletin *EXCHANGE*, please write to:

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Director of Communications
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